



DXV3D

INSTALLATION/OWNER'S MANUAL

DVD Multimedia Receiver with UltraMotion™ Display



Safety Notes:

The DVD video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash DVD video functions will only operate when vehicle is in Park and the parking brake is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion.

PREPARATION

WARNING

Upon installation of this Monitor/DVD player ("unit") into a vehicle, the driver of the vehicle must not operate this unit by watching videos or playing video games while driving. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

Several states prohibit the installation of monitors/DVD players if the screen is visible from the driver's seat. If you reside in a jurisdiction which has enacted such a law, this unit must not be installed so that the screen is visible from the driver's seat. When installing this unit in the front console/dashboard, the unit must be positioned so that it is facing the front passenger seat only. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

This unit is designed so that it may be operated only when the vehicle is in "Park" and the parking brake is fully engaged. To this end, this unit includes a parking brake lock-out feature which prohibits the unit from operating if the vehicle is not in "Park" and/or the parking brake is not fully engaged. When installing this unit, the installer must connect the parking brake detect wire ("Pink Lead") to the parking brake mechanism in order to make the parking brake lock-out feature operable. DO NOT simply ground the parking brake detect wire to a metal portion of the vehicle. Failure to properly install the parking brake lock-out feature could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

Once the parking brake lock-out feature is installed, the owner/user must not attempt to disrupt/neutralize the parking brake lock-out feature by (a) partially engaging the parking brake and/or (b) purchasing/using any device or unit designed to send necessary brake signals to the unit. Failure to follow these instructions could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

When operating this unit, keep the unit's volume level low enough so that the vehicle's occupants can hear traffic-related sounds such as police and emergency vehicles. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

PREPARATION

Safety Information

Please read all instructions carefully before attempting to install or operate.

Due to its technical nature, it is highly recommended that your DUAL DXV3D is installed by a professional installer or an authorized dealer. This product is only for use in vehicles with 12VDC negative ground only.

To prevent damage or injury:

- Make sure to ground the unit securely to the vehicle chassis ground.
- Do not remove the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or the possibility of water splashing.
- Do not subject the unit to excessive shock.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause the unit to malfunction.
- To prevent short circuits when replacing a fuse, disconnect the wiring harness first.
- Use only the provided hardware and wire harness.
- You cannot view video while the vehicle is moving. Find a safe place to park and engage the parking brake.
- If you experience problems during installation, consult your nearest DUAL dealer.
- If the unit malfunctions, reset the unit as described on page 9 first. If the problem still persists, consult your nearest DUAL dealer or call tech assistance @ 1-866-382-5476.
- To clean the monitor, wipe only with a dry silicone cloth or soft cloth. Do not use a stiff cloth, or volatile solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or remove the printing.
- When the temperature of the unit falls (as in winter), the liquid crystal inside the screen will become darker than usual. Normal brightness will return after using the monitor for a while.
- When extending the ignition, battery or ground cables, make sure to use automotive-grade cables or other cables with an area of 0.75mm (AWG 18) or more to prevent voltage drops.
- Do not touch the liquid crystal fluid if the LCD is damaged or broken. The liquid crystal fluid may be hazardous to your health or fatal. If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INSTALLATION

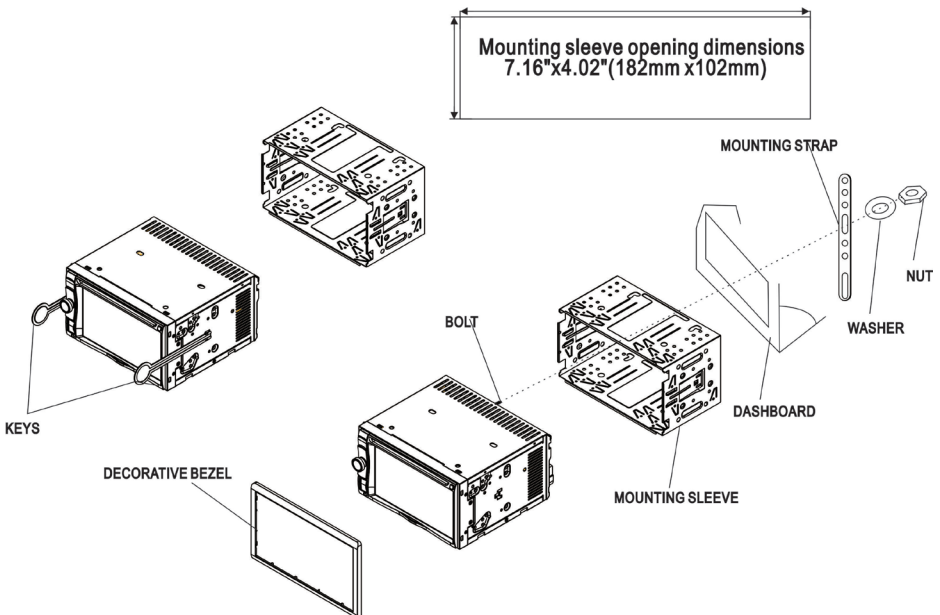
Preparation

Before You Start

- Disconnect negative battery terminal. Consult a qualified technician for instructions.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

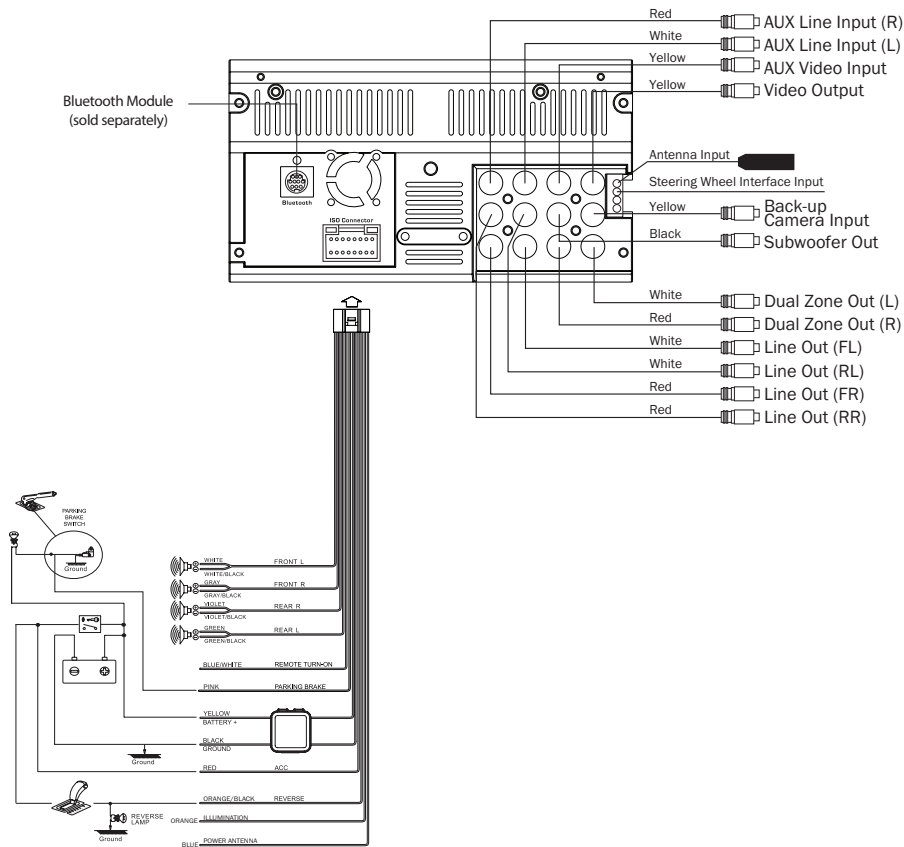
Getting Started

- Remove 2 transit screws located on top of the unit.
- Insert the supplied keys into the slots as shown, and slide the unit out of the mounting sleeve.
- Install mounting sleeve into opening, bending tabs to secure.
- Connect wiring harness as shown on page 6. Consult a qualified technician if you are unsure.
- Certain vehicles may require an installation kit and/or wiring harness adapter (sold separately).
- Reconnect negative battery terminal, and test for correct operation.
- Snap trim ring into place (if required).
- Slide unit into mounting sleeve to secure.



INSTALLATION

Wiring Diagram



Wiring Notes:

Subwoofer output

The **Subwoofer** preamp audio output (black jacket with green RCA) is active in all audio modes.

Rear camera input

A rear view camera (not included) can be used with the **Camera** input.

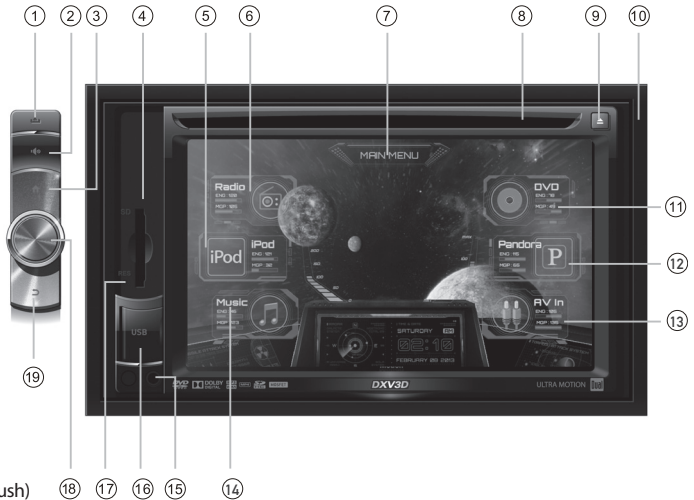
Note:

When replacing a fuse, make sure to use the correct type and amperage. Using an incorrect fuse could damage the unit. The DXV3D uses (1) 15 amp ATC mini style fuse located on the back of the unit.

OPERATION

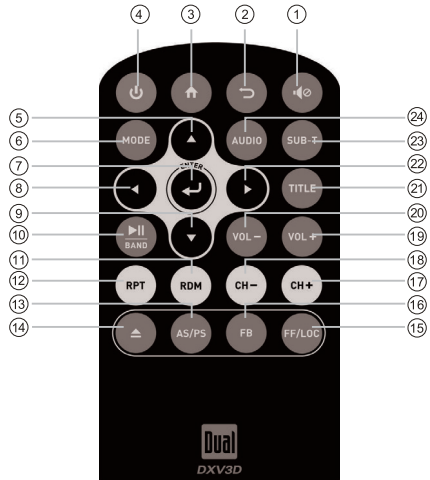
Control Locations

1. Open
2. Mute
3. Home
4. SD Card
5. iPod
6. Radio
7. Main Menu
8. Disc Slot
9. Eject
10. Trim Ring
11. DVD
12. Pandora
13. AV In
14. Music
15. Auxiliary Input 1
16. USB
17. Reset
18. Volume / Power / Select (Push)
19. Back



Remote Control

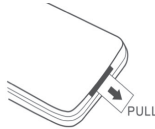
- | | |
|-------------------------|-----------------|
| 1. Mute | 13. AS/PS |
| 2. Back | 14. Eject |
| 3. Home | 15. FF/LOC |
| 4. Power | 16. FB |
| 5. Up | 17. CH+ |
| 6. Mode | 18. CH- |
| 7. Enter | 19. Volume Up |
| 8. Track Down | 20. Volume Down |
| 9. Down | 21. Title |
| 10. Play / Pause / Band | 22. Track Up |
| 11. Random | 23. Subtitle |
| 12. Repeat | 24. Audio |



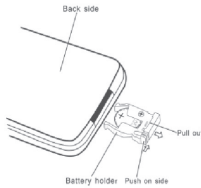
OPERATION

Remote Control Preparation

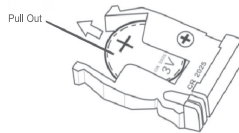
Remove battery insulation tape .



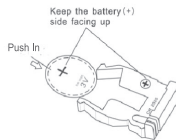
To insert or replace the battery, remove the battery holder.



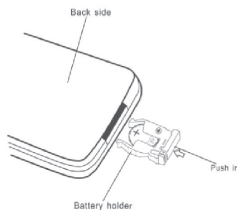
Remove the battery from the battery holder.



Install the new battery.
Make sure to keep the (+) side up.



Insert the battery holder .

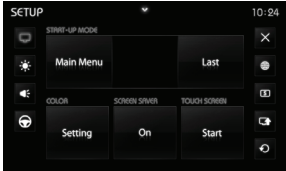


Notes:

- The remote control uses one 3 volt Lithium CR2025 battery. Remove the battery if the remote will not be used for a month or longer.
- Remove and dispose of battery properly.
- Do not store battery with metallic objects or materials.

OPERATION

General Operation

Power / Open	Momentarily press the volume knob to turn the unit on. Press and hold the volume knob for more than two seconds to turn the unit off.
Volume	Rotate the volume knob to increase or decrease the volume level (0-35).
Mute	Momentarily press MUTE to silence the audio. Momentarily press MUTE again to return to the previously selected volume. Rotating the volume knob while the volume is muted will also cancel the mute function.
3.5mm A/V Input	Connect external audio/video devices to the 3.5mm auxiliary A/V input on the front panel.
USB Port	Connect a USB device to play MP3/WMA files or view JPG photos. The DXV3D's USB port supports USB playback only. To connect a phone or other device for charging, use the USB port on the back of the unit.
UltraMotion™ Menu	 The UltraMotion™ Menu displays available modes of operation along with time and date information. Press a mode icon to select and begin playback of the corresponding mode. Press the Main Menu icon at the top of the screen to access the Main Menu.
Main Menu	 The UltraMotion™ display allows the user to customize Main Menu layout by re-arranging the mode icons on the left and right sides of the screen. Select a mode from the scrolling menu in the middle of the screen, press and hold it for 2-3 seconds, then drag it to the desired location and release. From the Main Menu screen: - View/select any operational mode by touching the corresponding icon on the right or left side of the screen. - View/select any operational mode by touching the mode name in the scrolling menu two times. - Select SETUP to enter the Setup menu.
Setup Menu	 From either the Main Menu or UltraMotion™ Menu screen, press SETUP to access the Setup Menu. Alternately, the Setup Menu can be accessed by pressing the volume knob. Select an icon on the left or right side of the screen to adjust the following setup options: General, Brightness, Audio, Steering Wheel Control, Frequency Spacing, Screen Saver, Settings and Reset. Press X to exit the Setup Menu at any time.

OPERATION

General Operation

Setup Menu

Press  to access **Display** setup options:

- **Startup Mode** - Select **Main Menu** or **Last** to set the unit to display either the Main Menu or the last mode of operation upon startup.
- **Color** - Press **Start** to manually adjust RGB color settings.
- **Screen Saver** - Select **On** or **Off** to enable or disable screen saver.
- **Touch Screen** - Press **Start** and follow prompts to calibrate touch screen.

Press  to access **Brightness** setup options:

- **Automatic** - Select **On** or **Off** to enable or disable automatic brightness settings, then manually adjust desired times and brightness settings.
- **Manual** - Use the arrow keys or sliding bar to manually adjust brightness settings of the unit.
- **Dimmer** - Select **On** or **Off** to enable or disable the dimmer function. When the dimmer is on, the backlight will be darker at night than in daytime. When it's off, the backlight will be same all the time.

Press  to access **Audio** setup options:

- **Source Level** - Adjust Source Level for each mode of operation (0-15).
- **Music Field**
 - Use arrows to adjust balance (right to left) and fader (front to back).
 - Select a Subwoofer Crossover option: **Off**, **80 Hz**, **120 Hz** or **160 Hz**.
 - Turn Buzzer **On** or **Off**.
 - Turn Loudness **On** or **Off**.
 - Adjust Subwoofer to desired level (0-15).
- **Equalizer** - Select desired equalizer setting.

Press  to access **Steering Wheel Control** setup options. Touch any icon in the menu, then press a button on the steering wheel. The icon will turn red, and that button will control the selected function. If you can not define the button as above, try with different levels, such as "LEVEL 1", "LEVEL 2".

Press  to access **Frequency Spacing** setup options:

- Select the appropriate frequency spacing for your geographical region.

Press  to access **Screen Saver** setup options:

- Select the desired screen saver for the unit.

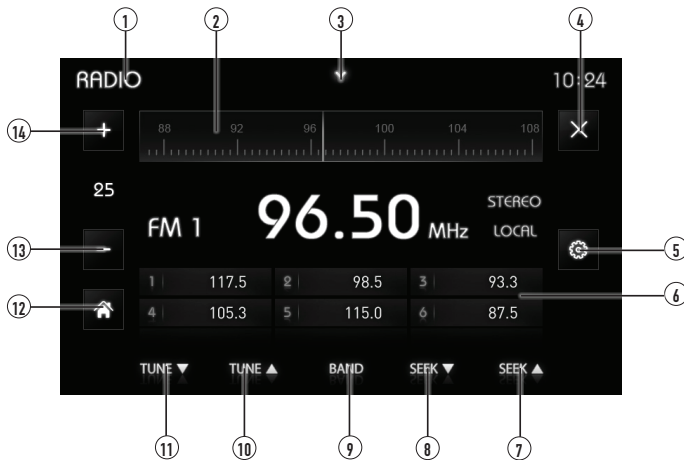
Press  to access **Settings** setup options:

- **Software Upgrade** - Select **Start** to initiate a software upgrade.
- **Language Settings** - Select desired language for the unit: **English**, **Spanish** or **Korean**.
- **Default Setting** - Select **Reset** to reset all settings to the original factory default.

Press  to **Reset** the main processor to the default settings to resolve abnormal operation or if the unit is inoperable.

OPERATION

AM/FM Tuner Operation



Tuner Operation

Select the **Radio** icon from either the Main Menu or UltraMotion™ Menu. The unit will begin radio play, and the radio display will appear on the screen.

Mode Indicator ①

Displays current mode of operation.

Frequency Bar ②

Use the frequency bar to manual adjust to the desired frequency.

Toolbar ③

Press to reveal the on-screen toolbar:

- Press to access the Main Menu.
- Press to manually adjust brightness settings.
- Press to set the time and date.
- Press to access audio setup options.
- Press to activate the screen saver.

Exit ④

Press to exit to the Main Menu.

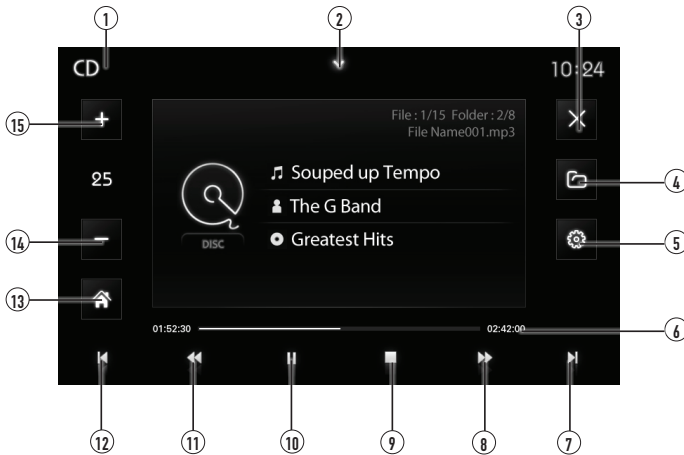
OPERATION

AM/FM Tuner Operation

Tuner Settings ⑤	Press to access the following tuner settings: • Press A.STORE to automatically find and store the six strongest stations in the current band as presets. • Press P.SCAN to play each preset station for a short amount of time. Press again to stop scan and play current station. • Select LOC or DX to set the unit to local or distance tuning.
Preset Stations ⑥	Displays the six preset stations stored in memory in the current band. Press any preset station to play it instantly. Up to 18 FM and 12 AM stations can be stored in memory.
Seek Up ⑦	Press SEEK ▲ to seek the next strong station.
Seek Down ⑧	Press SEEK ▼ to seek the previous strong station.
Band ⑨	Press BAND to cycle through the following bands: FM1, FM2, FM3, AM1 and AM2.
Tune Up ⑩	Press TUNE ▲ to adjust radio frequency up one step at a time.
Tune Down ⑪	Press TUNE ▼ to adjust radio frequency down one step at a time.
Main Menu ⑫	Press to return to the Main Menu.
Volume Down ⑬	Press to decrease volume level one step at a time.
Volume Up ⑭	Press to increase volume level one step at a time.

OPERATION

CD Operation



CD Operation

Insert disc into the slot with the label facing up, and playback will begin automatically. If a disc has previously been inserted and the unit has been operating in another mode, resume disc playback by selecting the Disc icon from the Main Menu or UltraMotion™ Menu.

Mode Indicator ①

Displays current mode of operation.

Toolbar ②

Press to reveal the on-screen toolbar:

- Press to access the Main Menu.
- Press to manually adjust brightness settings.
- Press to set the time and date.
- Press to access audio setup options.
- Press to activate the screen saver.

Exit ③

Press to exit to the Main Menu.

Track List ④

Press to display a list of all tracks on the CD. Press desired track number to begin playback of that track.

OPERATION

CD Operation

Disc Settings ⑤	Press to access the following disc settings: • Press Dual Zone once to turn on the Dual Zone function; press again to turn it off. Dual Zone enables CD play to continue in the rear zone even when the front zone is adjusted to another mode. • Press ⌂ to turn random play on or off. • Press A-B at the starting point of section you want to repeat (A) and again at the ending point (B). The unit will repeat that section. Press A-B again to cancel the repeat function.
Elapsed Time Indicator ⑥	Displays both the elapsed time and total time of the current track.
Tune/Track Up ⑦	Press to advance to the next track.
Fast Forward ⑧	Press to step through the following fast forward options: x2, x4, x8 and x20.
Stop ⑨	Press once to momentarily stop playback. Playback will resume at the current point. Press twice to completely stop playback. Playback will resume at the beginning of the disc.
Play/Pause ⑩	Press to play or pause playback.
Fast Reverse ⑪	Press to step through the following fast reverse options: x2, x4, x8 and x20.
Tune/Track Down ⑫	Press to return to the previous track.
Main Menu ⑬	Press to return to the main menu.
Volume Down ⑭	Press to decrease volume level one step at a time.
Volume Up ⑮	Press to increase volume level one step at a time.

OPERATION

MP3/WMA/JPG Operation



MP3/WMA/JPG Playback from Disc, USB Device or SD Card

To play MP3, WMA and JPG files, insert disc, connect USB device or insert SD card. Playback will begin automatically. To return to disc, USB or SD card playback from another mode of operation, select the Music icon from the Main Menu screen or UltraMotion™ Menu.

- **Using a Cable** - Connect a USB device to front USB port.
- **Using an SD Card** - Insert SD card into the SD slot located behind the volume knob.

Disc Controls

When playing MP3/WMA files from a CD, controls playback using the disc controls on pages 12-13.

USB/SD Card Controls

When playing MP3/WMA/JPG files from a USB device or SD card, navigate using the File Manager screen pictured above.

Mode Indicator ①

Displays current mode of operation.

Toolbar ②

Press to reveal the on-screen toolbar:

- Press to access the Main Menu.
- Press to manually adjust brightness settings.
- Press to set the time and date.
- Press to access audio setup options.
- Press to activate the screen saver.

OPERATION

MP3/WMA/JPG Operation

Exit ③	Press to exit to the Main Menu.
Directory ④	Displays a list of all folders and files on the device. Press any file name to begin playback of that file. Press any folder name to display the list of files in that folder, then press desired file name to begin playback. Press Go Back to navigate back to the File Manager.
Music Files ⑤	Press to view/select music files on the device.
Video Files ⑥	Press to view/select video files on the device.
Photo Files ⑦	Press to view/select photo files on the device.
Delete File ⑧	Select the file or folder to delete by pressing the corresponding box until a check mark appears , then press Delete.
Play ⑨	Select the file or folder to play by pressing the corresponding box until a check mark appears , then press Play.
Unselect All ⑩	Press to Unselect All files/folders.
Select All ⑪	Press to Select All files/folders.
Main Menu ⑫	Press to return to the main menu.
SD Card Playback ⑬	Press to select playback from an SD card.
USB Playback ⑭	Press to select playback from a USB device.
Go Back ⑬	Press to go back one level in navigation.

OPERATION

MP3/WMA/JPG Operation



USB/SD Card Playback

During playback from a USB device or SD card, the following controls enable efficient navigation:

Mode Indicator ①	Displays current mode of operation.
Toolbar ②	Press to reveal the on-screen toolbar: • Press to access the Main Menu. • Press to manually adjust brightness settings. • Press to set the time and date. • Press to access audio setup options. • Press to activate the screen saver.
Exit ③	Press to exit to the Main Menu.
Information Display ④	Displays available information about the current file, including track number, file name, album name and artist name.
File Manager ⑤	Press to access the File Manager.
Settings ⑥	Press to access the following settings: • Color: Select Blue, Orange or Pink on the playback display for the current track. • Reset: Press to reset unit to factory defaults.

OPERATION

MP3/WMA/JPG Operation

Playlist ⑦	Press to display all files in the current playlist. Press any file name to begin playback of that file.
Random ⑧	Press to toggle the Random feature on or off.
Repeat ⑨	Press to step through the following Repeat options: Repeat 1, Repeat All or Off.
Tune/Track Up ⑩	Press to advance to the next track.
Fast Forward ⑪	Press to step through the following fast forward options: x2, x4, x8 and x20.
Play/Pause ⑫	Press to play or pause playback.
Fast Reverse ⑬	Press to step through the following fast reverse options: x2, x4, x8 and x20.
Tune/Track Down ⑭	Press to return to the previous track.
Main Menu ⑮	Press to return to the main menu.
Volume Down ⑯	Press to decrease volume level one step at a time.
Volume Up ⑰	Press to increase volume level one step at a time.
JPG Controls	Select Photos from the File Manager, then select and Play the desired photos. Use the right/left arrows at the bottom of the screen to navigate through selected photos.
Set Screen Saver	Press  to save the current photo as your screen saver.
Zoom	Press + or - to zoom in or out on the current photo.
Rotate	Press  to rotate the current photo.
Slideshow	Press Down to step through slideshow commands: Down, Right, Fade In and Fade Out. Press 3 to set the number of seconds to display each image: 3, 5 or 10. Press  to play the slideshow.

OPERATION

Media Compatibility - USB/SD Card

File Type			WMA	MP3
File System	FAT	FAT 12	X	X
		FAT 16/FAT 32	✓	✓
File Extension	.mp3/.MP3/.Mp3/.mP3		X	✓
	.wma/.WMA		✓	X
	.rmp/.m4a		X	X
MPEG Format	MPEG 1		X	✓
	MPEG 2		X	✓
	MPEG 2.5		X	✓
Sampling Frequency	MPEG 1		X	32/44.1/48kHz
	MPEG 2		X	12/16/22.05/24kHz
	MPEG 2.5		X	8/11.025/12kHz
	WMA		32/44.1/48kHz	X
Bitrate	MPEG 1		X	32 ~ 320kbps
	MPEG 2		X	8 ~ 160kbps
	MPEG 2.5		X	8 ~ 160kbps
	WMA		32 ~ 192kbps	X
Other Information	Directory Depth		Unlimited	Unlimited
	File Name Length		32 bytes	32 bytes
	Total File Number		2000 files	2000 files
	Total Folder Number		200 folders	200 folders
	File Number via Folder		2000 files	2000 files
	MP3 ID3 TAG	ver.1.x	X	✓
		ver.2.x	X	✓
		Title, Artist, Album	X	✓
	WMA TAG	Title, Artist	✓	X

Notes:

- Due to ongoing technological advancement, some USB flash drives and/or SD cards may be incompatible with this unit.

OPERATION

Media Compatibility - CD/DVD

File Type				WMA	MP3
File System	ISO9660	Level 1, Level 2		✓	✓
		Level 3		X	X
	ISO9660 Extension	JOLIET	Playback	✓	✓
			Filename	32 bytes	32 bytes
	Other Extensions	ROMEO	Playback	X	X
			Filename	X	X
		Apple ISO		X	X
File Extension	.mp3/.MP3/.Mp3/.mP3			X	✓
	.wma/.WMA			✓	X
	.rmp/.m4a			X	X
MPEG Format	MPEG 1			X	✓
	MPEG 2			X	✓
	MPEG 2.5			X	✓
Sampling Frequency	MPEG 1			X	32/44.1/48kHz
	MPEG 2			X	12/16/22.05/24kHz
	MPEG 2.5			X	8/11.025/12kHz
	WMA			32/44.1/48kHz	X
Bitrate	MPEG 1			X	32 ~ 320kbps
	MPEG 2			X	8 ~ 160kbps
	MPEG 2.5			X	8 ~ 160kbps
	WMA			32 ~ 192kbps	X
Other Information	Directory Depth			Unlimited	Unlimited
	File Name Length			32 bytes	32 bytes
	Total File Number			2000 files	2000 files
	Total Folder Number			200 folders	200 folders
	File Number via Folder			2000 files	2000 files
	MP3 ID3 TAG	ver.1.x		X	✓
		ver.2.x		X	✓
		Title, Artist, Album		X	✓
	WMA TAG	Title, Artist		✓	X

OPERATION

Media Compatibility

Media Compatibility

The following types of discs are compatible:

- CD-DA, CD-ROM (ISO), CD-R, CD-RW
- DVD Video, DVD+R/RW, DVD-R/RW

The following types of discs/files are not compatible:

- WMA files that are protected by DRM (Digital Rights Management)
- WMA lossless format
- Discs recorded with Track At Once or packet writing
- MP3 PRO format, MP3 playlists
- RMP format
- WAV format
- WMV format
- DivX, Xvid format
- AVI format
- MPG, MPEG-4 format
- AAC, protected AAC, M4A format

Some recordable DVD's and CD's may be incompatible with this unit, depending on media type and recording method.

Playback Order

MP3/WMA playback sequence begins in the root folder of the disc, USB flash drive or SD card. Any empty folders or folders that do not include MP3/WMA/JPG files are skipped.

Compatible Recording Formats

ISO9660 standards:

- Maximum nested folder depth is 8 (including the root folder).
- Valid characters for folder/file names are letters A-Z (all caps), numbers 0-9, and "_" (underscore). Some characters may not be displayed correctly, depending on the character type.
- This device can play back discs in Joliet and other standards that conform to ISO9660. MP3/WMA written in the formats other than the above may not play and/or their file names or folder names may not be displayed properly.

Additional MP3/WMA Information

An internal buffer provides ESP (Electronic Skip Protection) to virtually eliminate skipping.

When playing a disc recorded with regular audio files (CD-DA or .WAV) and MP3/WMA files, the unit will play the MP3/WMA files only.

Notes

Some files may not play or be displayed correctly, depending on sampling rates and bit rates.

For best results, use the following settings when ripping MP3 files:
128kbps or higher constant bit rate
44.1kHz or higher sampling frequency

For best results, use the following settings when ripping WMA files:
64kbps or higher constant bit rate
44.1kHz or higher sampling frequency

OPERATION

WARNING

Upon installation of this Monitor/DVD player ("unit") into a vehicle, the driver of the vehicle must not operate this unit by watching videos or playing video games while driving. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

Several states prohibit the installation of monitors/DVD players if the screen is visible from the driver's seat. If you reside in a jurisdiction which has enacted such a law, this unit must not be installed so that the screen is visible from the driver's seat. When installing this unit in the front console/dashboard, the unit must be positioned so that it is facing the front passenger seat only. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

This unit is designed so that it may be operated only when the vehicle is in "Park" and the parking brake is fully engaged. To this end, this unit includes a parking brake lock-out feature which prohibits the unit from operating if the vehicle is not in "Park" and/or the parking brake is not fully engaged. When installing this unit, the installer must connect the parking brake detect wire ("Pink Lead") to the parking brake mechanism in order to make the parking brake lock-out feature operable. DO NOT simply ground the parking brake detect wire to a metal portion of the vehicle. Failure to properly install the parking brake lock-out feature could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

Once the parking brake lock-out feature is installed, the owner/user must not attempt to disrupt/neutralize the parking brake lock-out feature by (a) partially engaging the parking brake and/or (b) purchasing/using any device or unit designed to send necessary brake signals to the unit. Failure to follow these instructions could lead to driver distraction which could result in serious injury or death to the driver's occupants or persons outside the vehicle and/or property damage.

When operating this unit, keep the unit's volume level low enough so that the vehicle's occupants can hear traffic-related sounds such as police and emergency vehicles. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle's occupants or persons outside the vehicle and/or property damage.

OPERATION

DVD Setup - Region Management

DVD Region Management

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the DXV3D plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc. This player has been designed to play back DVD software that has been encoded for specific region areas. It cannot play back DVD software encoded for other region areas than the region areas for which it has been designed.

The DXV3D will play discs labeled "Region 1" or "All".

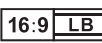
DVD region codes:

- 1 - USA, Canada
- 2 - Japan, Europe, South Africa, Middle East
- 3 - Rep. of Korea, Taiwan, Hong Kong, Parts of Southeast Asia
- 4 - Australia, New Zealand, Mexico, South America
- 5 - Eastern Europe, Russia, India, Africa
- 6 - China



DVD Disc Symbols

Symbol	12cm Disc Properties	Max Play Time
	Single side single layer (DVD-5) Single side double layer (DVD-9) Double side single layer (DVD-10) Double side double layer (DVD-18)	(MPEG 2 Method) 133 minutes 242 minutes 266 minutes 464 minutes
	Single side single layer (VCD)	(MPEG 1 Method) 74 minutes
	Single side single layer	74 minutes

Symbol	Meaning
	Number of voice languages recorded. The number inside the icon indicates the number languages on the disc (maximum of 8).
	Number of subtitle languages available on the disc (maximum of 32).
	Number of angles provided (maximum of 9).
	Aspect ratios available. "LB" stands for Letter Box and "PS" stands for Pan/Scan. In the example on the left, the 16:9 video can be converted to Letter Box video.
	Indicates the region code where the disc can be played. • Region 1: USA, Canada, East Pacific Ocean Islands • Region 2: Japan, Western Europe, Northern Europe, Egypt, South Africa, Middle East • Region 3: Taiwan, Hong Kong, South Korea, Thailand, Indonesia, South-East Asia • Region 4: Australia, New Zealand, Middle and South America, South Pacific Ocean Islands/ Oceania • Region 5: Russia, Mongolia, India, Middle Asia, Eastern Europe, North Korea, North Africa, North-West Asia

Notes:

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the DXV3D plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc.

OPERATION

DVD Setup - Parking Brake Initialization

SAFETY WARNING

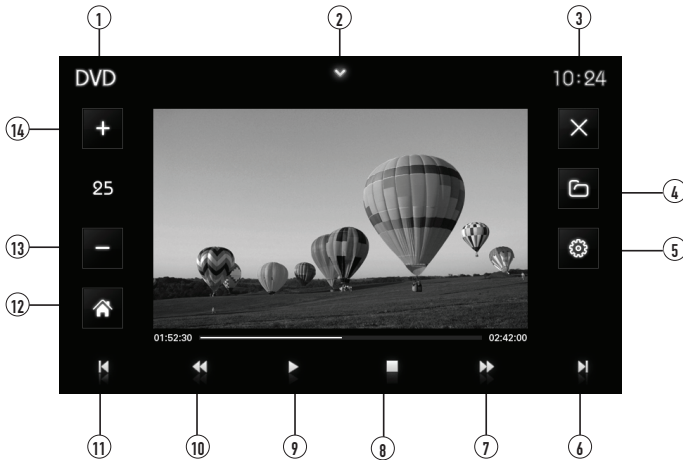
- The video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash video functions will only operate when vehicle is in Park and the **PARKING BRAKE** is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion. Refer to local laws in your area.
- The vehicle must be in park and the parking brake applied to view video on the in-dash monitor.
- As a safety feature, a warning message will show on the display when the vehicle's parking brake is not engaged. Video display on the in-dash monitor isn't allowed until the **PARKING BRAKE** is engaged. Connect the pink **PARKING BRAKE** wire to the brake switch circuit as described on page 6. **Note:** DVD and AUX AV audio can be heard while the vehicle is in motion without engaging the parking brake.

Parking Brake Initialization

- 1) Come to a complete stop, and put the vehicle in Park.
- 2) Fully engage parking brake.

OPERATION

DVD Operation



Inserting a Disc

Insert disc into the slot, and playback will begin automatically. Sub-menus may have to be pressed to access the DVD content. Read the directions of your specific DVD disc for other features.

Ejecting the Disc

Press  to eject the disc.

Mode Indicator ①

Displays current mode of operation.

Toolbar ②

Press to reveal the on-screen toolbar:

- Press  to access the Main Menu.
- Press  to manually adjust brightness settings.
- Press  to set the time and date.
- Press  to access audio setup options.
- Press  to activate the screen saver.

Exit ③

Press to exit to the Main Menu.

Document Folder ④

Press to select the document folder.

OPERATION

DVD Operation

DVD Settings ⑤

Press to step through the following DVD setting menus:

Menu:

- Press **MENU** to return to the main menu of the disc.
- Press **AUDIO** to select sound channel.
- Press **SUB-T** to select subtitles in English or Spanish or to turn subtitles off.

Setting:

- Press **Dual Zone** once to turn on the Dual Zone function; press again to turn it off. Dual Zone enables DVD play to continue in the rear zone even when the front zone is adjusted to another mode.
- Press **AUDIO** to turn the Random feature on or off.
- Press **A-B** at the starting point of section you want to repeat (A) and again at the ending point (B). The unit will repeat that section. Press **A-B** again to cancel the repeat function.

Repeat:

- Press **REVERSE** to select one of the following Repeat options: Repeat Chapter, Repeat Title, Repeat All or Repeat Off.

Stop ⑥

Press once to momentarily stop playback. Playback will resume at the current point. Press twice to completely stop playback. Playback will resume at the beginning of the disc.

Tune/Track Up ⑦

Press to advance to the next chapter.

Fast Forward ⑧

Press to step through the following fast forward options: x2, x4, x8 and x20.

Play/Pause ⑨

Press to play or pause playback.

Fast Reverse ⑩

Press to step through the following fast reverse options: x2, x4, x8 and x20.

Tune/Track Down ⑪

Press to return to the previous chapter.

Main Menu ⑫

Press to return to the main menu.

Volume Down ⑬

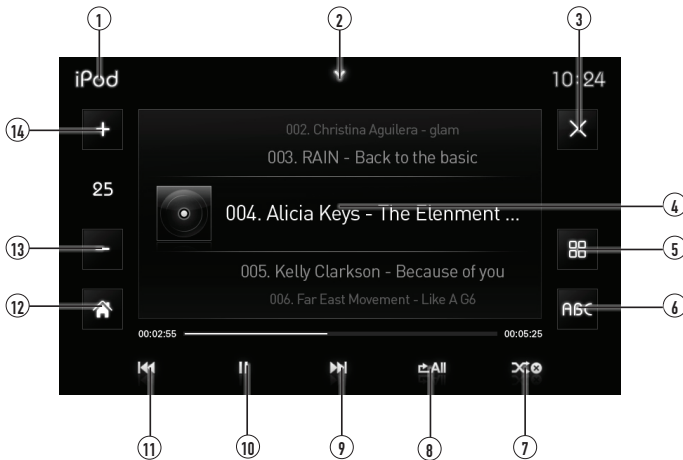
Press to decrease volume level one step at a time.

Volume Up ⑭

Press to increase volume level one step at a time.

OPERATION

Operation of iPod



iPod Operation

To play video from an iPod/iPhone device, connect the USB/ Video cable (sold separately) to the USB port & AV IN 1 port.

To play music from an iPod/iPhone device, connect the USB cable (included with your iPod/iPhone device) to the unit's USB port. Playback will begin automatically and can be controlled by either the DXV3D's on-screen controls or directly from the iPod.

Mode Indicator ①

Displays current mode of operation.

Toolbar ②

Press to reveal the on-screen toolbar:

- Press to access the Main Menu.
- Press to manually adjust brightness settings.
- Press to set the time and date.
- Press to access audio setup options.
- Press to activate the screen saver.

Exit ③

Press to exit to the Main Menu.

Information Display ④

Displays available information about the current song, including song title, album name and artist name.

iPod Menu ⑤

Press to reveal the iPod menu at the bottom of the screen, then press **MENU** to view all files and folders on the iPod device.

OPERATION

Operation of iPod

Audio Search While in the iPod Menu, press Audio to search by one of the following options: Album, Genre, Songs, Composer, Audiobook, Podcast, Nested Playlist, Genius Mixes and iTunesU. Press the desired category to enter and navigate any sub-menus.

Use the up/down arrows to navigate through the song list , then press **OK** to begin playback. Playback can also be started by pressing the song title directly.

Note: Press **GO BACK** on the face of the radio to go back one level in iPod navigation.

Video Search While in the iPod menu, press Video to search by one of the following options: Movies, Music Videos, TV Shows, Video Podcasts, Rented Movies and Video iTunesU. Press the desired category to enter and navigate any sub-menus.

Use the up/down arrows to navigate through the video list , then press **OK** to begin playback. Playback can also be started by pressing the video title directly.

Note: Press **GO BACK** on the face of the radio to go back one level in iPod navigation.

Alphabetical Search ⑥ Press to search alphabetically, and a row of letters will appear at the bottom of the screen. Use the right/left arrows to navigate, and press desired letter to select. The unit will display a list of songs starting with that letter. Press desired song name to begin playback.

Random ⑦ Press once to play all songs within the list in random order. Press again to cancel the random function.

Repeat ⑧ Press to step through the following Repeat options: Repeat 1, Repeat All or Off.

Tune/Track Up ⑨ Press to advance to the next track. Press and hold to fast forward through the current track.

Play/Pause ⑩ Press to play or pause playback.

Tune/Track Down ⑪ Press to return to the beginning of the current track, or press twice to return to the previous track. Press and hold to fast reverse through the current track.

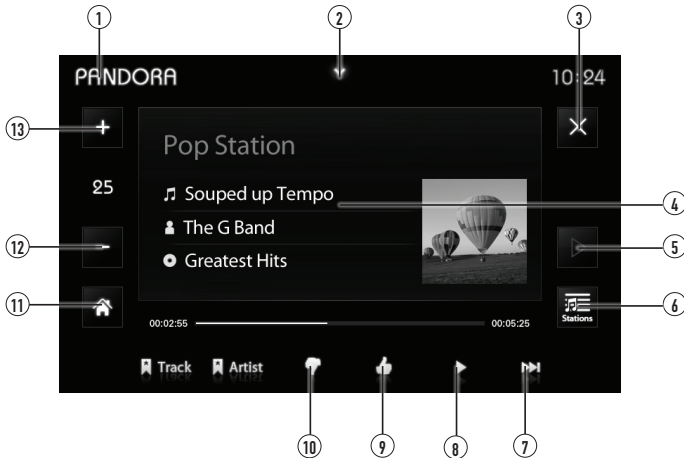
Main Menu ⑫ Press to return to the main menu.

Volume Down ⑬ Press to decrease volume level one step at a time.

Volume Up ⑭ Press to increase volume level one step at a time.

OPERATION

Pandora Operation



Pandora Operation

Control for Pandora requires:

- An iPhone device with a reliable data connection, or an iPod touch that is connected to wireless internet.
- The Pandora app installed on the iPhone/iPod device.
- An active Pandora account (sign up at www.pandora.com)
- The USB cable that came with your iPhone/iPod device.

Connect an iPod touch or iPhone (sold separately) to the USB port using the USB cable included with your iPod/iPhone device.

Mode Indicator ①

Displays current mode of operation.

Toolbar ②

Press to reveal the on-screen toolbar:

- Press to access the Main Menu.
- Press to manually adjust brightness settings.
- Press to set the time and date.
- Press to access audio setup options.
- Press to activate the screen saver.

Exit ③

Press to exit to the Main Menu.

Information Display ④

Displays available information about the current song, including song title, album name and artist name.

Current Song ⑤

Press to display information about the current song, including Pandora station name, song title, artist and album.

OPERATION

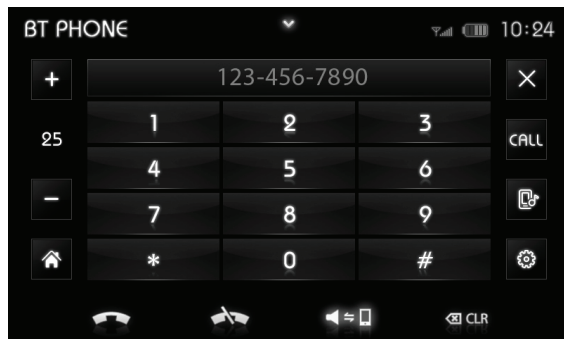
Pandora Operation

- | | |
|-----------------------|--|
| Station List ⑥ | Press to display a list of your Pandora stations sorted by the date they were added. Use the up/down arrow to navigate through and select the desired station.

Alternately, press A-Z to search stations alphabetically. Use the letter keys at the bottom of the screen to select a letter, and the unit will display the station names that begin with that letter. |
| Skip Song ⑦ | Press to skip the current song. |
| Play/Pause ⑧ | Press to play or pause the current song. |
| Thumbs Up ⑨ | Press to customize the station to play more songs like the song that is currently playing. |
| Thumbs Down ⑩ | Press to customize the station to play songs that are different from the song that is currently playing. |
| Main Menu ⑪ | Press to return to the main menu. |
| Volume Down ⑫ | Press to decrease volume level one step at a time. |
| Volume Up ⑬ | Press to increase volume level one step at a time. |

OPERATION

Bluetooth Operation



Bluetooth Operation

To connect a Bluetooth device, install and connect the BTM100 (sold separately). When connected to the DXV3D, the BTM100 supports HFP (hands-free profile), A2DP (advanced audio distribution profile), AVRCP (audio video remote control profile) and PBAP (phone book access profile).

Before you can use a Bluetooth device, it must be paired and connected. Make sure that Bluetooth is activated on your device before you begin the pairing process.

Pairing a Device

The BTM100 Bluetooth interface module (sold separately) broadcasts the pairing signal constantly when no devices are currently connected. Complete the pairing sequence from your Bluetooth device. Refer to the owner's manual for your device for more details.

Once pairing is complete, the TALK button on the BTM100 will be illuminated in blue. The device name is "BTM100". No password is required for pairing.

Note: The DXV3D can be in any mode of operation when pairing is performed.

Disconnecting a Device

Press **PAIR**, then press "Disconnect" to disconnect the currently-paired device. The unit must be disconnected from the current device before beginning the pairing sequence for a new device.

If you press **PAIR** when no device is connected, the unit will show the list of previously-paired devices. Press any device name to repair that device.

OPERATION

Bluetooth Operation

Receiving a Phone Call	Incoming phone calls will automatically appear on the display, and a ring tone will be heard. Press  to receive the incoming call or  to refuse the incoming call.
Ending a Phone Call	During an active phone call, press  to end a phone call. If the phone call was received when listening to music in another mode, the DXV3D will resume the previous mode.
Making a Phone Call	Press  to display the keypad and begin a phone call. Enter the phone number using the 0-9 buttons on the keypad. Note: Placing a phone call from your cell phone will also use the Bluetooth function of the BTM100.
Using the Phonebook	The BTM100 supports the PBAP Bluetooth profile to temporarily download the phonebook of the cell phone. The contents of the phonebook are deleted each time a cell phone is disconnected and are not permanently saved. To use the phonebook for making a call: • Press the keypad button from Bluetooth mode with a compatible cell phone connected. Press P-Book at the bottom of the screen to display downloaded phone book names. • Press the desired name on the phone book, then select between cell, home, work and other phone number types to make a phone call.
Streaming Audio	The DXV3D supports A2DP wireless streaming audio from your Bluetooth mobile device directly to the head unit. You can also control music from the front panel of the head unit using AVRCP (audio video remote control profile).

OPERATION

Bluetooth Operation

Streaming Audio

To stream music to your head unit, your mobile device must support the following criteria:

- A2DP profile to stream audio
- AVRCP profile to control your music. Check the owner's manual or manufacturer of your device for compatibility.
- Streaming audio must be enabled from your audio device. This option will vary depending on the device. Example: "wireless stereo."
- Disabling AV mode must be done from your mobile device.

After enabling streaming audio from a compatible mobile device, the head unit will display "AV MODE". The following functions can be used to control unit.

- Press ► to skip to the next available audio track.
- Press ◀ to skip to the previous audio track.
- Press ►/|| to toggle between play and pause during playback.
- Press ■ to stop the audio playback.

Note: On some mobile devices, it may be necessary to control the music from the device.

Auxiliary Inputs - AV1 & AV2

Using AV1 Input

Connect an optional audio/video source into the 3.5mm input on the front panel. To access audio or video, select AV from the Main Menu, then select AV IN from the AV Menu.

Using AV2 Input

Connect an optional audio/video source to the red/white/yellow RCA connectors on the back of the unit. To access audio or video, select AV1 from the Main Menu, then select AV2 from the AV Menu.

Rear Camera Operation - (Optional)

Using Rear Camera

Connect an optional rear camera to the Camera Input (yellow RCA connector labeled 'CAM IN'). Connect the reverse lamp wire to the REVERSE line of unit. The unit will automatically select camera mode when connected to the reverse lamp circuitry.

OPERATION

Limited One Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Dual Electronics Corp. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

Dual Electronics Corp. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased from an authorized Dual dealer and used in the U.S.A.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: software, installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product. Specific license conditions and copyright notices for the software can be found via www.dualav.com.

What to do?

1. Before you call for service, check the troubleshooting guide in your owner's manual. A slight adjustment of any custom controls may save you a service call.
2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:

- Call us toll-free at 1-866-382-5476
- E-mail us at cs@dualav.com

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.

OPERATION

Specifications

Disc	Frequency response: 20Hz-20kHz Channel separation @ 1kHz: >80dB D/A converter: 24 Bit
FM Tuner	Tuning range: 87.5MHz-107.9MHz Usable sensitivity: 10dBf 50dB quieting sensitivity: 20dBf Stereo separation @ 1kHz: 38dB Frequency response: 30Hz-13kHz
AM Tuner	Tuning range: 530kHz-1710kHz Usable sensitivity: 24uV Frequency response: 30Hz-2.3kHz
USB	Compatibility: High Speed USB 2.0 Output: 5VDC, 1A USB Class: Mass storage class
SD	Compatibility: SD memory card & SDHC memory card
Monitor	Panel size: 7" diagonal measurement Resolution: 800 (H) x 480 (V) Brightness (cd/m ²): 250 Contrast ratio: 500:1 Pixels: 1,152,000
General	Speaker output impedance: 4 ohms Line output voltage: 2 volts Line output impedance: 200 ohms Chassis dimensions: 7" x 7" x 2" (W x D x H) Design and specifications subject to change without notice.



CEA-2006 Power Standard Specifications
(reference: 14.4VDC +/- 0.2V, 20Hz~20kHz)

Power Output: 18 Watts RMS x 4 channels at 4 ohms and $\leq 1\%$ THD+N
Signal to Noise Ratio: 80dBA (reference: 1 watt into 4 ohms)

OPERATION

Troubleshooting

Problem	Cause	Action
Unit will not turn on (no power)	Yellow wire not connected or incorrect voltage	Check connections for proper voltage (11–16VDC)
	Red wire not connected or incorrect voltage	
	Black wire not connected	Check connection to ground
Unit has power (but no sound)	Fuse blown	Replace fuse(s)
	Speaker wires not connected	Check connections at speakers
	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
Unit blows fuse(s)	Yellow or red wire touching chassis ground	Check for pinched wire
	Speaker wires touching chassis ground	Check for pinched wire
	Incorrect fuse rating	Use fuses with correct rating
Unit has audio (but no video)	Parking brake safety circuit not connected	Check connections at parking brake
	Parking brake not applied	Apply parking brake as described on page 24
No video display (when in reverse)	Reverse circuit not connected	Check connections at reverse lamp
	Vehicle is not in reverse	Select reverse gear
DVD does not start playback	Physical defect in media Wrong region	Check media for scratches Use discs labeled "Region 1" or "All" only
IR remote does not work	Dead battery	Replace battery
Excessive skipping	Unit is not mounted correctly	Check mounting sleeve
	Physical defect in media	Check media for scratches
"Wrong Region" appears on display	Region code error	Use discs labeled "Region 1" or "All" only

For Your Records

Please keep your original sales receipt and be prepared to provide this receipt in the event you require service, as your original receipt is considered the best proof of purchase and indicates the date you purchased your Dual product.

Dealer Name _____

Dealer Phone _____

Purchase Date _____

Register Your Product

Register your product online at www.dualav.com



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"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

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Monday-Friday, 9AM-5PM EST

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